

# Technical Mapping Advisory Council

# Minutes

March 2-3, 1998 Baltimore Maryland

## Call to Order and Announcements

The Meeting was called to order at 8:38 a.m. on Monday, March 1, by Mark Riebau, presiding. Member Don Hull was unable to attend. The Chairman announced that Jeffrey Aust would not be able to continue on the Council as a representative of Federal National Mortgage Corporation, but that Kevin Hickey is present in his stead. Mike Buckley announced that the official appointment letter for Mr. Hickey will be forthcoming from the FEMA Director.

Attending for all or part of the meeting were:

#### Members

Mark Riebau, ASCE, Chairman Peggy Bowker, NFDA Michael K. Buckley, FEMA Charles Challstrom, NGS Kari Craun, USGS Kevin Hickey, Fannie Mae Brian Hyde, AFSPM Wendy Lathrop, ACSM Michael Moye, NationsBanc Al LeQuang, Freddie Mac

#### Others

John Caldron Page Cockrell , ACSM liaison to FEMA John Kohl, private practice land surveyor
Bill DeGroot, NAFSMA, Technical Advisor
Katie Hayden, FEMA
Arnold H. Lanckton, Synectics Corporation
Robert Mason, USGS
Tim McCormick, Dewberry and Davis
Matt Miller, FEMA
Norman Miller, Dewberry and Davis
Zekrollah Momeni, Dewberry and Davis
A.J. Myers, surveyor, alternate for

A.J. Myers, surveyor, alternate for Wendy Lathrop Mary Jean Pajak, FEMA Jeff Sparrow, Dewberry & Davis

## **Action on Minutes of February 12, 1998**

Motion: Wendy Lathrop moved to approve the Minutes of the February 12, 1998,

teleconference meeting as distributed. The motion was seconded by Charles

Challstrom.

Discussion:

Mr. LeQuang asked for clarification as the "remaining issue" referred to on page 2, first paragraph, of the February 12 minutes. Mike Buckley responded that it relates to a refund of insurance premiums to Mr. Baar for the time he was required to have flood insurance because of an erroneous determination that his property was in the floodplain

Wendy Lathrop commented that, in talking with surveyors and mappers who deal with flood mapping issues, she has learned that some insurance companies will not accept LOMAs as valid changes to flood maps. This is one reason for problems in obtaining refunds of premiums. Mike Buckley asked for Wendy's assessment of a reason for insurance companies' not accepting the LOMA. Wendy replied that some phrases in the LOMAs are confusing and that the letters are not consistent in all regions. She gave as an example of confusing language the phrase that property "is not entirely in the flood zone." Matt Miller noted that the language in the letter had been formulated using an IRS model, and clarified that FEMA began using a one-page LOMA about two years ago both as a cost-saving measure and as a first step to automation. Perhaps some inconsistencies are due to annotations of three to five pages that may be attached to the LOMA.

During discussion of possible sources of the problem, it was clarified that the refund policy is summarized in a LOMA, as is information about the benefits of purchasing insurance voluntarily at the lower rate. Homeowners may not have the benefit of this information, however, if the LOMA goes to a developer.

Refund policies also were discussed. Refunds are available in cases in which a LOMA is issued excepting a piece of property from the federal requirement that flood insurance be purchased. Insurance purchased voluntarily is not subject to refund. Wendy Lathrop reported that some lenders require insurance but may not agree to a refund if the property is later determined not to be in the floodplain. She also reported hearing about problems with the knowledge level of insurance agents, and asked, "How can we educate them?" Matt Miller responded that he had contacted representatives of the Institute for Business and Home Safety and the Insurance Institute for Property Loss Reduction. Those two groups represent agents and producers, and he suggested that the Council invite them to make a presentation. The Chairman concurred, and Matt Miller agreed to follow up.

The Chairman asked for the Council's opinion regarding the desirability of asking for participation of one of the insurance organizations as a technical advisor. The Council endorsed the suggestion by acclamation. Al LeQuang pointed out that, from personal experience, he finds it difficult to get a consensus from insurance groups because the "insurance industry" is not a unilateral organization.

The Chairman asked for a response from Mary Jean Pajak to the question (page 2 of the February minutes) regarding payment for Wendy Lathrop's participation in the elevation certificate revision. Mary Jean responded that FIA will cover those expenses.

Discussion moved to reported problems in getting forms through the library to the mitigation area on the FEMA Website. Mike Buckley will follow up with the Webmaster contract through the Public Affairs office on this problem.

Action: The minutes of the February 12, 1998, teleconference meeting were approved as submitted.

## Modernization Plan, Mike Buckley

The Director of FEMA understands that changes to the mapping program are needed and that changes will cost money. He met on Friday with Chairman Lewis of the House Appropriations Committee and will meet with Senator Bond later this week to discuss it. As soon as Mike Buckley hears the results of the discussions, he will transmit the information to the Council.

Appropriations hearings for the FY 99 budget also are taking place. In discussion, Mike Buckley reported that the administration budget proposal does not include a specific line-item request to modernize the mapping program. It is not known what level of support will be available to move the modernization program along but a number of activities can be started in the interim.

Matt Miller reviewed the history of the modernization plan, noted that the initiative will now focus on developing specifications, and distributed the final plan document, "Proceedings in Preparation for the July 30, 1997, Report to the Honorable James L. Witt, Director, Federal Emergency Management Agency," February 1998. He also distributed "Map Modernization Objectives for FY 1998," and reviewed each objective with the group.

Matt Miller reported the status of Project Impact and the interest shown by the President in disaster-resistant communities. Administration support for Project Impact is clear, it will be a theme in all of FEMA's work, and the mapping program can leverage resources by joining with Project Impact. One way to do this is to ensure high-quality maps for the seven pilot communities.

In response to a question about how Project Impact communities were selected, Mike Buckley reported that criteria are flexible because FEMA wants the freedom to be creative in defining this new kind of federal-local partnership. The initiative is still evolving, and selection criteria may later be developed. A special unit has just recently been created, headed by Maria Vorel, to implement the program. Representatives from various parts of the agency have been detailed to the unit, with Priscilla Scruggs representing the Hazard Identification and Risk Assessment Division.

In discussing the objective to "support development of HAZUS flood module," Matt Miller explained that HAZUS (Hazard U.S.) is a program for modeling and assessing hazards

that was created to be earthquake-specific. Modules for flood and wind are now being developed in cooperation with the National Institute of Building Science (NIBS). HAZUS is a very powerful loss-estimation tool because it draws on all available data and brings it into a GIS environment to enable analyses of the areas at particular risk to a disaster. It supports planning to focus resources and assess sites of projected damages. It will identify the locations of critical facilities and show the epicenter of an earthquake – identifying the area of potentially greatest damage. Mr. Buckley continued that a key component of accurate loss estimation is good knowledge of the building stock, particularly critical facilities (e.g., pipelines, bridges, power plants). HAZUS relies on public sector data for critical facilities information, which varies in quality from community to community, but there is no good inventory of buildings. The task of collecting building data has devolved to the regions and communities.

Continuing with his presentation, Matt Miller reported that a manager will be assigned to each map modernization objective.

In discussing Objective 17 (develop new study processes, i.e., redefine the TEC/SC relationship and begin implementation in FY 1998), Matt stressed the need for early training for study contractors and TECs and for more interaction between TECs and the region – particularly during selection of the base map. Knowledge the TECs have about how the maps are actually produced will be helpful to the regional engineers, save money, and shorten the study time frame.

Discussion turned to the subject of base maps, during which the following comments were made:

- Care should be taken that there is agreement among all parties on the base map, and that the decision is not made unilaterally by the TEC;
- A partnership program to agree on a DOQ would help;
- The community would be well served to look to USGS for maps;
- A method should be developed for determining whether hydrology is acceptable;
- A partnership that originates with the state would help in breaking down the adversary system.

Discussion moved to the subject of more flexibility and less time in contracting. Several concepts are being pursued: regional contracting, multi-year contracts, and task order contracts with base and option years. Questions were raised about continued or expanded use of Limited Map Maintenance Program contractors, using local contractors in the states, and the reasons why FEMA does not let small contracts through a simplified system as localities do. Mike Buckley stated that one of the reasons for establishing cooperating technical communities is to enable contracting with communities. He also assured the group that contracting issues will be addressed in the modernization program, and acknowledged the need for better relationships with local agencies.

To a question about criteria for becoming a cooperating technical community, Matt Miller responded that the criteria have not yet been established and the Technical Mapping Advisory Council can help invent it. Levels of participation could even be considered. He expressed caution about ensuring manageability. With a staff of only about 9 people to implement the initiative in addition to their regular jobs, care will need to be taken to structure the system so it is manageable at the same time it avoids creating boxes into which all communities must fit, thereby reducing the flexibility needed. Suggestion was made to link the initiative with the Community Rating System to pool resources.

Matt added another objective to the list distributed: to use GPS effectively in establishing elevations. Mike Buckley added the issue of using new technologies, such as synthetic aperture radar (SAR) and light detection and ranging (LIDAR).

Matt reported that work would proceed in full partnership with NGS and others in the Federal community. In response to a question about the GPS initiative, he clarified that it will focus on unscrambling the signals to make faster, more accurate geodetic measurements. Charles Challstrom added that there are two levels of service in GPS, standard and precise, and described the characteristics of each. NGS uses the standard service, and Mr. Challstrom believes FEMA could do the same. Brian Hyde questioned why the GPS capability is not now being used by FEMA in light of the problems that result from decisions based on non-engineering judgments. Mark Riebau pointed out that this issue is addressed in a modernization plan goal. Matt reported that one impediment is the question of who pays for what (USGS or FEMA) in terms of establishing high-water marks. He added that reactivation of the Federal Coordinating Committee could help, and that reactivation should be incorporated into the disaster SOPs.

## Presentation by ACSM

Wendy Lathrop introduced A.J. Myers and Page Cockrell of ACSM. Mr. Myers stated that he has received correspondence and reports from the Council, and complimented the Council on its most recent report. He is a local surveyor. Surveyors, realtors, and appraisers, he said, are the first in the line of attack when a homeowner goes into closing and is told that flood insurance must be purchased. That responsibility leads to a series of phone calls during which the National Flood Insurance Program has to be explained. Even though he is not involved in the development of maps, Mr. Myers has seen improvement in the map in the last couple of years, and it now uses "fairly accurate" contours. There has been some progress in getting new maps, and the change in fees in February 1997, was a good initiative. Technical Assistance has been really outstanding from the Chicago office of FEMA, Matt Miller, and Dewberry & Davis. It has been very helpful for folks from FEMA to go to Cleveland and work with local officials and practitioners, who are going to continue the practice annually to help to educate people. The bad news is that some nationwide flood-rating companies do poor work. Perhaps there should be penalties built in for 10 percent problems in their work.

Mike Buckley clarified that Mr. Myers was speaking of map determinations issued by commercial firms, and Mr. Myers added that he has had problems with a flood zone running through a piece of property that was determined not to be in the flood zone. On survey, the

property clearly is in the flood zone but the determinator responds that it is not according to the FEMA map.

Mr. Myers added that, when LOMAs are issued, a note accompanies them stating that a copy went to the local community. He reported going to a county to find out who received the LOMA, and no one knew where the local repository was. He stated that he has to depend on the best source available – the Department of Natural Resources – and its staff is not sure it has all the LOMCs issued on a map. On top of this, title companies are clueless – their people are stuck between the consumers and the lenders and they have to deal with this. Appraisers don't understand the problem – the questions they ask indicate a lack of knowledge. There should be a procedure for surveyors to issue a "determination of map error." A surveyor can submit for a LOMA so obvious that it cannot be denied; but the borrower, thinking he needs insurance, does not go to closing. FEMA should set criteria for situations such as this. A newsletter describing new products would be nice. Anyone on a user list should get a newsletter every three or four months sharing problems and solutions.

Mr. Cockrell introduced himself as the Chair of the ACSM Technical Advisory Committee to FEMA, which serves as a liaison between ACSM and FEMA. He suggested that Council meetings held in conjunction with the meetings of Governors of the National Society of Professional Surveyors would provide a good forum for dispensing information.

In his committee's first meeting last year, people had many questions and shared horror stories. At its meeting yesterday, the group was excited about the maps being made digitally. Two issues were raised. The first is that surveyors do not receive adequate information about changes to maps, and don't necessarily know whom to call or what questions to ask. It is important to open up communication between surveyors who use FEMA maps and understand the process and the surveyors who need access to map information but don't necessarily use the FEMA maps or understand how they are created. Wendy Lathrop added that a key concern is that many lenders do not understand that the surveyors are working in the best interests of the loan holders. Some lenders do not accept LOMAs, and some will arbitrarily choose one determination over another that may be based on better technical data. Another concern is that of converting data; specifically, the problem of old and missing benchmarks being converted from 1929 to 1988 datum.

The Chairman reported that the issue of errors in LOMCs has been raised by FEMA staff, and is on the agenda for the Council tomorrow at 8:00 a.m. Peggy Bowker added that the benchmark issue is important, and cited a study conducted for FEMA in Sparks County in which the problem was encountered. Brian Hyde cited an issue of transferring highway measurements back and forth between English and metric units. Charles Challstrom reported that states have different requirements for measurement systems.

## Council Action on the Modernization Plan

The Chairman stated his opinion that, considering the Council's involvement with the preparation of the modernization plan, it would be appropriate for the Council to take official action with respect to the plan. Constituent organizations of members also may want to take positions. He called for comments.

The Council engaged in lengthy discussion about the modernization plan. There was a great deal of support for the plan, but several expressions of interest in additional clarification. Points made included:

- (Bill DeGroot) "Pretty good," but subject to much interpretation; support it with frequent review.
- (Mike Moye) Suggested going back to constituencies to get support for the plan and give it additional strength.
- (Wendy Lathrop) Support in concept. Because of the generalizations in the documents, some nuances are not apparent. Council involvement in an advisory capacity should continue during implementation.
- (Brian Hyde) Many provisions of the plan are open to interpretation, and there is a need to clarify our position, if one has been formulated, on specific points where interpretation may be at issue.
- (Peggy Bowker) There are dates set for accomplishment of certain items discussed in the plan, and the budgets have been submitted. In developing a position I would like to (1) see a list of priorities; and (2) the budget.
- (Mike Buckley) There is not specific request in the administration's budget for funding the map modernization proposal, although the Director has met with Chairman Lewis of FEMA's house appropriations committee and will meet with his Senate counterpart. One reason for the meetings is to discuss map modernization, but how and where it will be reflected it in the budget request will be up to the Director, who knows the process well. Appropriations hearings are scheduled in the House to begin tomorrow and in the Senate late this week or early next week.
- (Mark Riebau) Perhaps it would be useful for the organizations we represent to support funding for the map modernization program if we, as a body, agree with the report and its direction.

*Motion:* Wendy Lathrop moved that the Council strongly support the concepts presented in the modernization plan conditional on the Council's being an integral part of the implementation teams to be defined by the Plan. The motion was seconded by Charles Challstrom.

#### Discussion:

During discussion, the Council was divided on whether to simply support the concepts of the modernization plan, or to support it conditional on involvement during implementation. Al LeQuang advised that it is a Freddie Mac policy not to take positions on such matters, and he would have to abstain in either case. Some members were critical that a specific implementation budget was not available, and others expressed confidence that the FEMA Director would select the best approach for allocating funds to the modernization program.

Substitute motion: Wendy Lathrop offered a substitute motion to strongly support the modernization of the mapping program as outlined in the modernization plan and strongly agree with FEMA's commitment to involve the Council as advisors to the implementation teams. The substitute motion was accepted by Mr. Challstrom, second for the original motion.

#### Discussion:

Mike Moye suggested that action could be facilitated if the Director asked for the Council's support and the Council responded. Charles Challstrom questioned whether the Council should acknowledge that a resolution to support the modernization plan had been introduced, and that action is being held in abeyance until further budget and implementation information is available. Mike Buckley agreed to ask the Director to write a letter to Council and to include budget information if possible.

Motion to Defer: Charles Challstrom moved to defer action on the substitute motion until the next teleconference meeting, to allow time for receipt of additional information and discussion with constituent organizations. The motion was seconded by Wendy Lathrop, and carried unanimously.

Wendy Lathrop volunteered to draft the language of a Council resolution on receipt of the letter from the Director.

## Assessment of Benefits of the Modernization Plan

Mary Jean Pajak presented a brief overview of the Assessment of Benefits. FEMA staff had a limited amount of time to prepare this document (about 6 weeks), so existing data were used to calculate the benefits and costs. Ms Pajak called the group's attention to the table on page 14 that summarizes benefits, and explained the source and use of the data. She noted that FEMA staff were assisted in preparation of the document by Dewberry and Davis, Michael Baker, Jr., Inc., and an economist familiar with OMB procedures. The staff considered the time period covered and estimated interest rates and the costs to build to higher standard. Benefits were calculated based on the rate at which maps are currently being updated with the addition of provisions for accelerated mapping assuming availability of additional funds. Estimates, in general, are conservative.

During discussion following the presentation, comments made included (1) the number of panels to be revised each year increases; (2) debate about whether the number of LOMAs and LOMRs perhaps indicates more compliance by lenders rather than more building in the floodplain, or whether there is more development in wetlands and other flood-prone areas due to decreasing availability of land for development; (3) the average price per review of determination in a floodplain is expected to be reduced annually by \$18.75 per review; and (4) the probable realism of the predicted savings.

Ms Pajak continued the explanation of how benefits were estimated, noting that estimates do not include reductions in losses to residential structures due to improved construction because of a lack of good data in this area. Reductions in losses to infrastructure and to federal

construction due to compliance with the executive order were not incorporated. A side benefit will result from updating detailed flood data. V-zones will be expanded and more floodways will be mapped. Different levels of risk were not quantified, and the staff was not able to include some qualitative benefits.

To Mark Riebau's question about reflecting the "ever-increasing spiral of disaster assistance," Ms Pajak reported that the administration of disaster assistance is mentioned, and the subject is covered as well under the reduced costs of new construction. Discussing the costs of storing and archiving maps and documentation, Ms Pajak replied that those costs are particularly hard to quantify, but do not constitute a significant portion of total costs. Peggy Bowker added that estimating costs of storing digital data is complicated by the evolving nature of the technology.

Concluding the discussion, the Chairman noted his opinion that the costs as well as the benefits are probably reported conservatively.

## **Next Meeting**

The Council agreed by acclamation to the next face-to-face meeting in Atlanta, Georgia, in connection with the flood conference, on Sunday, May 31 (all day) and Monday afternoon, June 1. The contractor was tasked to find meeting space, preferably at the site of the flood conference (Waverly Renaissance) and, if not available, close by the Buckhead area.

The Chairman requested that FEMA report at the meeting on agency actions taken in response to Council recommendations, to which Mike Buckley replied that those matters probably would be addressed in the letter discussed earlier from the FEMA Director. Matt Miller added that he and Peggy Bowker will talk at least weekly about FEMA activities.

# Budget Plan for Fiscal Year 1998

Consolidated budget information for calendar years 1996 and 1997 was distributed and discussed. Ms Pajak stated a preference to report costs in standard categories by activity, and asked for comments from the Council. No objection was heard.

The Chairman reported that telephonic meetings of the Council generally cost about \$2,000, and face-to-face meetings about \$20,000. Annual reports can be expected to average about \$18,000. Considering the numbers of Council meetings, the total budget is in the ballpark for FY 1998 at about \$100,000 annually. In the future, however, four meetings a year are projected instead of three, Council members may need to attend meetings in support of implementation activities for the modernization plan and related tasks, and airfares are expected to increase significantly, as are penalties for changing restricted tickets.

At the conclusion of discussion, Mike Buckley agreed to request \$140,000 for the Council in FY 1999.

### **Elevation Certificate**

Wendy Lathrop reported that she is still waiting for the draft version of the elevation certificate, which was expected by the end of February, and is working at the ACSM Conference to encourage participation in the revision. Her intention was to distribute the draft at the Conference so that representatives of all 50 states would have an opportunity to review it, but distribution of the draft has been delayed by 30 days to allow for regional review. Unfortunately, the subsequent deadlines have not been rescheduled, so she will have a very short time to get comments from the Council and from 26 surveyors around the country. The draft should now come out about the middle of March, there will be a two-week review period and a meeting in May. Mike Buckley, in response to a request from Wendy Lathrop, stated that he will determine why the review dates were not revised to accommodate the late issuance of the draft certificate, and will telephone Ms Lathrop to advise her. The time frame, he continued, may have been determined by the specifications for notifying the companies – that is typically an issue because the companies have to get the new form into their systems and have their computers ready to accommodate a new form. They object to receiving changes more than twice a year, and have introduced dates on which they will accept changes.

Responding to a question from Mark Riebau, Ms Lathrop reported that Jhun de la Cruz has the lead for the activity at FEMA and Greenhorne and O'Mara is the support contractor. Mr. Riebau stated that the form has already expired, and Ms Lathrop replied that the old form has been redated to expire in 1999. The draft is not expected to be noticed in the Federal Register for public comments.

The Chairman directed that information on the follow-up to this issue be reported when the draft Minutes are distributed.

## Map Service Center Contract

The Chairman asked for an update on the proposed contract for the Map Service Center procurement. Mike Buckley reported that the synopsis has not yet been published in the Commerce Business Daily, and that the reasons for the urgency to let the contract are no longer at issue. The reasons had to do with differences in interpretation of requirements by the contractor and FEMA. The main issue of the use of new technology, however, remains important and the contracts office has interpreted the current contract as being limited in that regard. It will be corrected in the new scope of work. If the new contract cannot be let this year the current contract will be extended so that FEMA is not in the position of not having a contract in place.

Mike Buckley reported that FEMA has addressed the issue of archiving, which is going to be accomplished electronically to the extent feasible. All maps will be archived, and much of the documentation for maps will be readily available on the Internet. Brian Hyde discussed a problem in getting an index map for Denver, which has been sought for six months

Mark Riebau questioned whether there has been any movement on the Council's recommendation that index maps, because of their importance, be reproduced even if they are out of print. Mike Buckley responded that the new contract will ensure that the capability is in

place to reproduce index maps. The offering will be noticed in the Commerce Business Daily as soon as the comments received by staff are considered and acted on. There is a hope that a new contract will be let this fiscal year.

Before the discussion turned to the Council's goals, the Chairman commended Wendy Lathrop for her role as an author and contributor to Surveyor Magazine, a recommended publication.

## **Review of Council Goals**

The Council discussed whether the goals as stated continue to reflect the needs of the Council. Some members stated a preference to "archive" the goals and work in the future from the "issues" and "future directions" defined in the last Annual Report. Others seemed to prefer linking the goals to the objectives of the map modernization program on the basis that the program will focus on those objectives in FY 1998. All agreed that the asterisks (indicating priority) on the list of goals in the packet be removed. One member expressed concern about communication and public education having more emphasis than the base map.

Motion: Peggy Bowker moved that the Council review its goals for their value as an expression of the Council's priorities before attempting to link them to FEMA's modernization plan. Brian Hyde seconded the motion and it carried.

The Council debated various approaches to the goals review. Some members expressed a preference to have a stated list of goals; others suggested developing a mission statement and applying the duties in the Council's charter as its goals. Comments included, "Maybe we have moved beyond our goals," and "Tweaking them doesn't necessarily make them more effective." Peggy Bowker noted that, in writing her section of the Annual Report, it became clear that nothing had been done toward accomplishing some of the goals the Council set for itself. Brian Hyde concurred, and reported the same trouble in articulating issues for the Annual Report. The goal of addressing multiple hazards was "just shunted aside" despite its high priority; and "doesn't fall within the purview of the mapping program although FEMA has that charge." The relationship of disasters and disaster assistance to flood maps was questioned, as was whether helping to control increasing costs of disasters is a purpose of the program. Serious concern was expressed that the Council has dealt with issues that range far afield of its charter. Suggestions were made to add tsunamis and dam failures as issues. The Council should concentrate, another suggested, on the base map, digital standards, and public education – and leave issues such as multiple hazards to those who have legitimate responsibility for them.

The chairman concluded debate on the goals with a charge to Peggy Bowker to prepare a draft and submit to the Council via e-mail. Discussion of the draft will take place at the Atlanta meeting.

# Presentation and Discussion on Flood Hydrology

Brian Hyde, Peggy Bowker, and Bill DeGroot presented "Hydrology 101" to the Council. Using descriptive visual materials, participants learned lessons such as "What is a watershed and how does it work?" and "Who owns the water in what part of the country?" The group learned

how to read a hydrograph, discussed the relationship of the peak rate of flow for a watershed to the BFE, and learned the characteristics of hydrology vs. hydraulics, and the methodologies for determining each.

Important to the Council's activities is the knowledge that because there are different methodologies for determining hydrology, measurements by different groups produce different results. Differences are exacerbated when identical assumptions are not used. The same problem exists in hydraulics. In mapping, this means that a great deal of debate can take place among the experts in determining how to calculate the 100-year-flood level. The Council was made aware that the inherent accuracy of the analysis has to be kept in mind in determining the value of a base map.

Robert Mason of USGS presented information about estimating flood frequency. The primary point made was that even with the use of the best method of estimation and the best possible data, estimates poorly predict nature.

Brian Hyde closed the hydrology presentation with a discussion of FEMA's methods for flood hydrology and how local, regional, and state officials might work with FEMA as partnerships are built and strengthened.

During discussion of the presentation, Mike Buckley stressed that doing the hydrology consistently is important, despite the number of methodologies used in engineering practice. Mark Riebau expressed the view that the specific methodology is less important than getting reasonable results. Bill DeGroot had been unaware until recently that FEMA used regression analysis in evaluating their (Bill's) hydrology. Matt Miller noted the importance of FEMA's acting responsibly in devolving authority to other levels of government.

The group, by acclamation, expressed appreciation to Brian Hyde and Peggy Bowker for the presentation, and several members stated that it was very helpful in the Council work.

## Report from the Working Group on Letters of Map Amendment

Mark Riebau distributed the results of the deliberations of a working group, consisting of Mark Riebau, Mike Moye, Brian Hyde, and Bill DeGroot. The purpose of the group was to find ways to reduce the workload of FEMA staff by devolving the LOMA process to local officials. The substance of the report follows on page 13.

Mr. Riebau noted that the report of the Subcommittee was based on these assumptions:

- 1. The National Flood Insurance Program was created to reduce the cost to the nation of flood-related disasters.
- 2. The sole purpose of obtaining a LOMA is to avoid buying mandatory flood insurance.

In discussing the LOMA report, Mike Buckley commented that another purpose of obtaining a LOMA is to remove the "stigma of the floodplain" from a piece of property – in

other words, to make developed land more marketable by eliminating specific requirements for floodplain property (e.g., prohibition against putting septic tanks in 100-year floodplains).

After lengthy discussion about how authority to issue LOMAs might be transferred to other units of government, how and what kind of training would be needed, the process for setting criteria, the need for ensuring consistency – and numerous related subjects – Brian Hyde formulated a recommendation. He suggested that FEMA convene a one- or two-day workshop to develop a recommendation that FEMA move forward with delegation of authority to issue LOMAs in areas where detailed flood-level information is available.

#### Report of the Subcommittee on Delegation of LOMA Responsibility

Process elements discussed by the Subcommittee:

- 1. LOMAs can be issued by the chief executive officer of a local government (mayor, county board chairman, or their designee).
- 2. Base flood elevation must be determined by a registered licensed professional engineer, who must have an errors and omissions insurance policy in effect.
- 3. The elevation of the structure and lowest adjacent grade must be determined by a registered land surveyor. The RLS must have an errors and omissions insurance policy in effect.
- 4. The LOMA must be filed with FEMA and the state NFIP Coordinating officer.
- 5. FEMA will make the LOMA available on the Internet to be downloaded, and will provide to local units of government the necessary forms to be followed in the LOMA process.
- 6. The property for which a LOMA has been issued will be ineligible for disaster assistance in the event of a flood-related disaster.
- 7. The local official issuing the LOMA must provide it to the registrar of deeds or other officer responsible for maintaining the records of real estate transactions in each county, and the official must attach the LOMA to the deed of property and the notice that the property will be ineligible for disaster assistance.

Matt Miller stated that, if the recommendation is approved, it would be necessary to involve the people who will be helping FEMA to issue LOMAs to ensure that a "sane policy" results. He also suggested that it might be necessary to hold a workshop to simplify the LOMA process before scheduling one to discuss delegating LOMA authority. Mike Buckley suggested a pilot project, and Brian Hyde followed up that Project Impact communities or communities with a good CRS rating could be used. Mike Moye preferred using an entire state for a pilot

study because it would better enable understanding of how the process will be received and enacted at all levels than if communities only were selected. Brian added that these kinds of details could be addressed at the workshop. Bill DeGroot recommended that that FEMA go forward with the process of delegating the issuance of LOMAs to local communities, and that the details to be left up to agency staff.

Mike Moye offered a revised recommendation: that FEMA conduct a workshop to work out the details of delegating LOMA issuance to other levels of government, and then test the idea through a pilot study. He added that the time it takes to get a decision is of primary concern to lenders.

The Chairman concluded debate, asking for a motion.

Motion:

Brian Hyde moved that the Council recommend that FEMA convene a workshop to develop recommendations for moving forward with a pilot program to involve local and state and regional agencies in administering LOMAs in areas where detailed flood elevation information is available.

Peggy Bowker seconded the motion.

#### Discussion:

Peggy Bowker commented that it makes sense to simplify the LOMA process and to work initially only with areas in which detailed studies have been completed. Administrative procedures can be refined while the process goes forward to make it possible to include unnumbered A-zones at a later time.

Matt Miller followed with a discussion about the need for standard criteria (either the lowest floor or lowest adjacent grade) for LOMR-F decisions so that surveyors and engineers do not have to become dirt detectives. Brian Hyde offered an amendment to his motion to address unnumbered A-zones and LOMR-Fs but the amendment was not accepted by the second.

The question of who will be invited to the workshop was raised. The Chairman pointed out that organizations having the strongest interest are represented on the Council. Matt Miller stated that the Council will help to choose the participants, but that no one should be excluded from the workshop. He also stated that FEMA staff will assign lead responsibility for the workshop. Mike Buckley supported the motion, stating that he would consult with the Council on the results of the workshop and seek further input as the pilot is implemented.

Mike Moye wondered why there has been such an immense and sudden increase in the number of LOMA requests, and whether the Council should determine the reasons for the increase before taking action that might compound the problem.

Hearing no further discussion, the chairman called for a vote.

Vote: The motion carried with six affirmative votes. Mark Riebau registered opposition to the motion.

## **Future Meetings**

The Chairman reviewed a comparison of costs of meetings in Washington and Atlanta. The added cost for the Atlanta meeting is less than \$400. After discussion, the group agreed on the dates and sites of the next three meetings, and discussed the agendas.

In discussion (see item 3 on the conference call agenda below), members expressed various points of view about the Council's role *vis a vis* base map standards. Some promoted further refinements by the Council to the recommendation to develop standards. Others pointed out that a recommendation that base map standards be developed and implement had been made, and preferred to leave to FEMA further action, receiving periodic briefings about actions taken. Strong support was expressed for addressing hydrology in the study process and debating the issue of future conditions hydrology. Provisions for acceptance of a base map by local and state officials also was supported. The discussion concluded without a clear decision.

Referring back to the issue of hydrology, Mike Buckley reported that the Office of General Counsel has ruled out mapping for future hydrology conditions on the basis of ensuring fair and equitable pricing of insurance. He added, "there is an opportunity to reopen that issue," noting that the ruling left the door open for future reconsideration. In response to a request, he also committed to send copies of the ruling to Council members. Bill DeGroot suggesting framing the discussion in terms of other initiatives, such as CRS and Project Impact, that may dovetail with the Council's objectives. Mike Buckley clarified that consideration could be given to offering credits that equate to reductions in insurance rates in communities that use future conditions hydrology on their maps. Mike also agreed to identify individuals from the OGC, FIA, and perhaps someone else from the CRS program to participate in the hydrology discussion at the Atlanta meeting.

Matt Miller expressed the opinion that there is a built-in inequity in reducing insurance rates for future conditions hydrology in some communities and not in others. Future conditions are speculative and not scientifically projectible. Further, rates need to be separated from the issue of future conditions hydrology. He suggested asking the presidents of the Flood Insurance Producers National Committee (FIPNC) and the Flood Insurance Servicing Companies of America Association (FISCAA) to participate in the meeting. FIPNC represents the agents, and FISCAA represents the Wrote-Your-Own Insurance Companies.

The next three meetings and agenda items follow (Table 1).

Table 1. Proposed Meeting Schedule and Agendas

April 23, 11:00 a.m. to 1:00 p.m., Eastern time  Conference call	<ol> <li>Act on the minutes of the Baltimore meeting</li> <li>Clarify issues to be reported in the 1998 annual report (top 5 were suggested)</li> <li>Discuss the LOMA recommendation made at the Baltimore meeting</li> <li>Decide whether to refine recommendations on base maps and include hydrology recommendations</li> <li>Discuss priorities for the modernization plan.</li> </ol>
May 31 (Sunday), 9:00 a.m. to 5:00 p.m. (lunch will be served) and June 1, 1:00 p.m., Atlanta, GA, afternoon, in conjunction with flood conference. Group dinner reservation will be made for Sunday.	<ol> <li>Discuss the priority issues set in the April Conference call and decide how the Council wants to address them; determine which ones will require recommendations in the annual report</li> <li>FEMA update on modernization plan objectives</li> <li>FEMA update on actions regarding Council recommendations</li> <li>Present information about hydraulics and the relationship of hydrology to hydraulics; include the Flood Insurance Producers National Committee (FIPNC) and Flood Insurance Servicing Companies of America Association (FISCAA)</li> <li>Develop format for and outline the 1998 Report</li> <li>Report on Goals revision (Peggy Bowker)</li> </ol>
September 10 and 11, Washington, D.C., metropolitan area (in the vicinity of USGS offices in Reston; lunch will be served both days); USGS will host; Kari Craun will coordinate for USGS	<ol> <li>Present information about the digital ortho quads – teach Cartography 101 (Kari Craun)<sup>1</sup>;</li> <li>Bring back the gentleman from FGDC to report on standards being worked through FGDS. (Matt Miller urged the group to focus on outcomes in standards development.)</li> <li>Priorities for the modernization plan.</li> <li>Report from FEMA on the process for complying with national geospatial data standards.</li> </ol>

Announcements were made that (1) Matt Miller and Bill DeGroot will make a presentation at the Flood Conference in Atlanta on Tuesday, June 2; (2) the FIA Administrator may stop by the meeting; and (3) Mary Jean Pajak, Melba Gandy, and Mark Riebau participated in a conference call to clarify administrative procedures and responsibilities. The Chairman directed that a list of responsibilities be attached to the minutes of the meeting.

Minutes, Technical Mapping Advisory Council, March 2-3, 1998

 $<sup>^{\</sup>rm 1}$  Suggestion also was made to move this item up to the Atlanta Agenda.

## Report on the FGDC

Matt Miller reported that he had attended the recent Federal Geodetic Data Committee meeting but not as FEMA's representative. The FGDC is an intergovernmental body chaired by Secretary Babbit. It is charged to promote the Federal Geodetic Control Subcommittee, which is chaired by the National Geodetic Survey. Kari Craun clarified that the FGDC is comparable to a steering committee and that subcommittees deal with specific issues. A base map subcommittee is chaired by USGS, and has guidelines for minimum content standards. Positional accuracy standards are under consideration by a working group, and after preliminary review, were submitted to FGDC for additional review. Ms Craun stated that these activities are pertinent to the standards the Council is considering.

Continuing discussion centered on merging different datasets onto the base map, the lack of standards for doing so, problems of scale and the format of the data. The question of what midpoint to use between "ideal" and "feasible" map quality was raised.

Matt Miller reported that setting and using a standard is a big cost issue as well as a policy issue for FEMA. He also pointed out that, as FEMA develops mapping specifications that meet the national geospatial data standards, maps will agree with other standards with greater competency. Brian Hyde asked that the Council be briefed in September on the process for meeting those standards on the basis that the Council needs to understand it sufficiently to judge the feasibility of possible recommendations.

## **New Business:**

The Chairman reported the wide distribution by FEMA of the "Quick 2" program, a simplified version of a computer program for establishing BFEs where they previously have not been established. He expressed concern about use of the program by individuals other than qualified engineers, and offered to make copies available to those who would like to have them.

# Adjournment

Hearing no further business, Mike Moye moved to adjourn. Brian seconded the motion, which carried unanimously.

The Chairman declared the meeting adjourned at 3:32 p.m.

Respectfully submitted,

[original signed]

Mark Riebau, Chairman

# Items Distributed at the Meeting

- Buckley, Michael K. Memorandum, "Proceedings: Modernizing FEMA's Flood Hazard Mapping Program," February 27, 1998.
- Dewberry & Davis. Technical Mapping Advisory Council Budget Report, January 1, 1996 December 31, 1997.
- FEMA MT-TS-HS. "Map Modernization Objectives for FY 1998," March 1, 1998.
- FEMA. "Proceedings in Preparation for the July 30, 1997, Report to the Honorable James L. Witt, Director, Federal Emergency Management Agency: Modernizing FEMA's Flood Hazard Mapping Program," February 1998.
- HAZMED. Technical Mapping Advisory Council Financial Report, Initial 1997 Expenses: 06/13/97 9/30/97.
- HAZMED. Technical Mapping Advisory Council, Quarterly Financial Report, 10/01/97-12/31/97.
- Riebau, Mark. "Proposed Revisions to LOMA Process," report of the LOMA subcommittee of the Technical Mapping Advisory Council, n.d.
- Technical Mapping Advisory Council. "Goals," November 1996.
- USGS. USGS Flood-Frequency Regionalization, n.d.